

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Docket No.: LADRA

In re Application of:)
UWE LADRA & ELMAR SCHÄRERS)
Filed: Simultaneously Herewith)
For: CONTROL METHOD FOR JERK-LIMITED)
SPEED CONTROL OF A MOVABLE)
MACHINE ELEMENT OF A NUMERICALLY)
CONTROLLED INDUSTRIAL)
PROCESSING MACHINE)

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

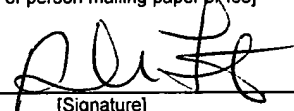
Express Mail mailing label number: **EV 375169635 US**

Date of Deposit: **April 2, 2004**

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450".

ANTONELLA FUSILLO

[Name of person mailing paper or fee]



[Signature]

S I R:

In accordance with 37 C.F.R. 1.56, applicant wishes to call the attention of the Examiner to the following references A) which is cited in the instant specification and references B) to D) which were cited in a German Office Action issued by the German Patent Office with regard to the corresponding German patent application No. 103 15 525.2. Applicant does not admit that any of the cited documents constitutes prior art against the pending application.

	Country:	Patent or Appl. No:	Patentee or Applicant:	Issue or Filing Date:
A)	Germany	DE 102 00 680 A1	Siemens AG	08-07-2003
B)	Germany	DE 100 63 722 A1	Siemens AG	07-11-2002
C)	Germany	DE 101 18 477 A1	Seiko Epson	12-06-2001
D)	Europe	EP 0 685 779 A1	Toyota J.	12-06-1995

Copies of these references are submitted herewith along with form PTO-1449. The Examiner is requested to initial the attached form PTO-1449 and to return a copy of the initialed document to the undersigned as an indication that the attached references have been considered and made of record.

☒ This Information Disclosure Statement is filed within three months of the filing date of a national application other than a continued prosecution application under 1.53(d), so that no fee under 37 C.F.R. §1.97 is due.

☐ This Information Disclosure Statement is filed within three months of the date of entry of the national stage as set forth in 1.491 in an international application, so that no fee under 37 C.F.R. §1.97 is due.

☐ This Information Disclosure Statement is filed before the mailing of a first Office Action on the merits, so that no fee under 37 C.F.R. §1.97 is due.

☐ This Information Disclosure Statement is filed before the mailing of a first Office Action after the filing of a request for continued examination under §1.114, so that no fee under 37 C.F.R. §1.97 is due.

☐ This Information Disclosure Statement is filed after the issuance of a first office but before issuance of a final action under §1.113, or a notice of allowance under §1.311.

☐ This Information Disclosure Statement is submitted after the mailing of a final action or a notice of allowance, but before payment of the issue fee.

☐ The undersigned submits the following statement requesting consideration of this statement:

The undersigned hereby states:

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement;

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in §1.56(c) more than three months prior to the filing of the information disclosure statement.

☐ The fee of \$180.00 set forth in 1.17(p).

☐ The Commissioner is hereby authorized to charge the fee as set forth in 1.17(p), and any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-0502.

☒ The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 06-0502.

In addition, applicant notes with respect to any information that is not in English language as follows:

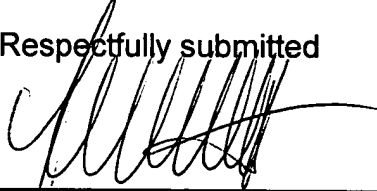
Reference B) relates to dampen as effectively as possible a critical resonant frequency (f_{res}) of the axes of a moving machine element with the aid of a jerk limitation. Damping in the case of a desired frequency is achieved when the longest possible time (Tr_{Lim}), which can be traveled with a maximum permissible jerk (r_{Lim}), is selected such that $1/Tr_{Lim}$ coincides with the lowest natural frequency (f_{res}) of the participating axes. The path dynamics are adapted by virtue of the fact that the $Tr_{Lim}=a_{Max}/r_{Lim}$ yielded by the prescribed dynamics limiting values is varied by reducing the maximum jerk (r_{Lim}) such that damping results for the lowest natural frequency (f_{res}) of the participating axes.

Reference C) describes an acceleration and deceleration curve formation device (1) and a servomotor control device (4) to generate an acceleration-deceleration curve to determine the maximum speed and maximum acceleration that can be attained for a minimum amount of movement.

The above-identified application discloses and claims an invention patentable over this prior art. Entry of the references above set forth into the file of the above application is believed to be in order and is respectfully requested.

Respectfully submitted

By:


Henry M. Feiereisen
Agent for Applicant
Reg. No. 31,084

Date: April 2, 2004
350 Fifth Avenue, Suite 4714
New York, N.Y. 10118
(212) 244-5500
HMFWS:af

Form PTO-1449U.S. Department of Commerce
Patent and Trademark Office**INFORMATION DISCLOSURE CITATION****Attorney's Docket No.****LADRA****Applicant****UWE LADRA et al.****Appl. No.****Filing Date****Group****Examiner****U.S. PATENT DOCUMENTS**

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date, if appropriate

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Translation
	DE 102 00 680 A1	08-07-2003	Germany			no
	DE 100 63 722 A1	07-11-2002	Germany			no
	DE 101 18 477 A1	12-06-2001	Germany			no
	EP 0 685 779 A1	12-06-1995	Europe			yes

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Examiner:**Date considered:**

*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.